## CLAIMS

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- 1. A method of reducing the serum level in a mammal of any one or more of the following:
  - a) cholesterol;
  - b) low density lipoprotein (LDL) cholesterol relative to high density lipoprotein (HDL) cholesterol;
  - c) low density lipoprotein (LDL) cholesterol;
  - d) very low density lipoprotein (VLDL) cholesterol;
  - e) apolipoprotein B; and
  - f) triglycerides

by the ingestion of a composition containing  $\beta$ -casein where the  $\beta$ -casein is comprised of at least 95%  $\beta$ -casein  $A^2$ .

- 2. A method as claimed in claim 1 where the  $\beta$ -casein is comprised solely of  $\beta$ -casein  $A^2$ .
- 3. A method for treating any disease or disorder associated with mammalian serum total cholesterol levels, LDL cholesterol levels, apolipoprotein B levels, or triglyceride levels by the ingestion of a composition containing  $\beta$ -casein where the  $\beta$ -casein is comprised of at least 95%  $\beta$ -casein A<sup>2</sup>.
- 4. A method as claimed in claim 3 where the disease or disorder is selected from hypercholesterolemia, hyperlipidemia, and atherosclerosis.
- 5. A method as claimed in any one of claims 1 to 4 where the composition is a food or food product.
- 6. A method as claimed in claim 5 where the food or food product is milk or a product containing or processed from milk.
- 7. A method as claimed in any one of claims 1 to 6 where the composition is a dietary supplement.
- 8. A method as claimed in claim 7 where the dietary supplement is a nutriceutical which is ingested for optimising any one or more of the group consisting of

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- performance during exercise, weight loss, weight gain, muscle building, and muscle repair.
- 9. A method as claimed in any one of claims 1 to 8 where the composition is milk containing β-casein where the β-casein is comprised of at least 95% β-casein A<sup>2</sup>.
- 10. A method as claimed in claim 9 where the  $\beta$ -casein is comprised solely of  $\beta$ -casein  $A^2$ .
- 11. A method as claimed in any one of claims 1 to 10 where the composition has been formed by the addition of an amount of  $\beta$ -casein  $A^2$  sufficient to alter serum cholesterol levels and/or serum triglyceride levels in a human.
- 12. A method as claimed in any one of claims 1 to 11 where the  $\beta$ -casein  $A^2$  is obtained from the milk of bovine cattle or from the milk of yaks, buffalo, sheep or goats.
- 13. The use of  $\beta$ -casein  $A^2$  in the manufacture of a composition for reducing the serum level in a mammal of any one or more of the following:
  - a) cholesterol;
  - low density lipoprotein (LDL) cholesterol relative to high density lipoprotein (HDL) cholesterol;
  - c) low density lipoprotein (LDL) cholesterol;
  - d) very low density lipoprotein (VLDL) cholesterol;
  - e) apolipoprotein B; and
  - f) triglycerides.
- 14. A dietary supplement formed by the addition of  $\beta$ -casein to a food or drink for human consumption where the  $\beta$ -casein is comprised of at least 95%  $\beta$ -casein A<sup>2</sup>.
- 15. A dietary supplement as claimed in claim 13 where the  $\beta$ -case in is comprised solely of  $\beta$ -case in  $A^2$ .
- 16. A dietary supplement as claimed in claim 13 where the  $\beta$ -casein  $A^2$  is obtained from the milk of bovine cattle or from the milk of yaks, buffalo, sheep or goats.